

REMARKS

The Applicants thank the Examiner for the careful examination of this application and respectfully request the entry of the amendments indicated hereinabove.

Claims 1-18 are pending. Of the pending claim set, Claims 1-10 are rejected and Claims 11-18 are withdrawn from consideration. Claims 1 and 10 are amended hereinabove.

Amended independent Claim 1 positively recites forming a layer of insulating material over the total exposed surface of the lightly-doped extension regions. These advantageously claimed features are not taught or suggested by the patents granted to Guo, Moore, or Tseng et al.; either alone or in combination.

Guo does not teach the advantageously claimed invention because Guo does not teach forming a layer of insulating material over the total exposed surface of the lightly-doped extension regions (column 3 lines 24-27; FIGS. 2 and 4). Similarly, Moore does not teach the advantageously claimed invention because Moore does not teach forming a layer of insulating material over the total exposed surface of the lightly-doped extension regions (paragraph 0031; FIG. 4). Furthermore, Tseng et al. does not teach the advantageously claimed invention

because Tseng et al. does not teach forming a layer of insulating material over the total exposed surface of the lightly-doped extension regions (column 4 lines 1-37). Therefore, the combination of Guo, Moore, and Tseng et al. also does not teach forming a layer of insulating material over the total exposed surface of the lightly-doped extension regions, as advantageously claimed.

Regarding Claim 5, the Applicants traverse the assertion (on page 4 of the Office Action) that Claim 2 of Guo teaches the advantageously claimed insulating layer of Claim 5. The Applicants submit that Claim 2 of Guo is directed to the gate dielectric (column 5 line 1); however, the gate dielectric cannot be the advantageously claimed insulating layer of Claim 5 because the advantageously claimed insulating layer is formed over the LDD regions (see Applicants' Claim 1) but the gate dielectric layer of Guo (element 12 of FIGS. 2 and 4) is not formed over the LDD (as positively recited in the Applicants' Claim 1).

Regarding Claim 6, the Applicants respectfully traverse the assertion (on page 4 of the Office Action) that Claim 4 of Guo teaches the advantageously claimed methods of thermal annealing, plasma treatment, or N implantation. The Applicants submit that Claim 4 of Guo lists the composition of gases for the nitridizing step but does not specify the claimed methods (such as the N₂ plasma treatment).

Regarding Claim 8, the Applicants respectfully traverse the assertion (on page 4 of the Office Action) that Claim 22 of Guo teaches the advantageously claimed time range of less than 10 seconds. The Applicants submit that Claim 22 of Guo does not specify the advantageously claimed time range.

Due to the foregoing reasons, the Applicants respectfully traverse the Examiner's rejection of Claim 1 and respectfully assert that Claim 1 is patentable over the patents granted to Guo, Moore, and Tseng et al.; either alone or in combination. Furthermore, Claims 2-9 are allowable for depending on allowable independent Claim 1 and, in combination, including limitations not taught or described in the references of record.

Amended independent Claim 10 positively recites forming a layer of silicon oxide over the total exposed surface of the lightly-doped extension regions. These advantageously claimed features are not taught or suggested by the patents granted to Guo or Tseng et al.; either alone or in combination.

Guo does not teach the advantageously claimed invention because Guo does not teach forming a layer of silicon oxide over the total exposed surface of the lightly-doped extension regions (column 3 lines 24-27; FIGS. 2 and 4). Similarly, Tseng et al. does not teach the advantageously claimed invention because Tseng et al. does not teach forming a layer of silicon oxide over the total exposed surface

of the lightly-doped extension regions (column 4 lines 1-37). Therefore, the combination of Guo and Tseng et al. also does not teach forming a layer of silicon oxide over the total exposed surface of the lightly-doped extension regions, as advantageously claimed.

Due to the foregoing reasons, the Applicants respectfully traverse the Examiner's rejection of Claim 10 and respectfully assert that Claim 10 is patentable over the patents granted to Guo and Tseng et al.; either alone or in combination.

For the reasons stated above, this application is believed to be in condition for allowance. Reexamination and reconsideration is requested.

Respectfully submitted,

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